

ENTOMOLOGICAL NEWS

AND

PROCEEDINGS OF THE ENTOMOLOGICAL SECTION

ACADEMY OF NATURAL SCIENCES, PHILADELPHIA.

VOL. XVI.

DECEMBER, 1905.

NO. 10.

CONTENTS:

Bruner—Two remarkable new Costa Rican Locusts.....	313	Cockerell—A new Bee of the genus <i>Perdita</i> from Texas.....	331
Skimmer—A Review of a Review.....	316	Editorial	332
The 'Biologia Centrali-Americana'.....	317	Notes and News	333
Shaw—List of Micro-Lepidoptera taken in Hampton, New Hampshire.....	323	Literature	336
Paxson—Mimicry and Protective Coloration	327	Doings of Societies.....	340

Two Remarkable New Costa Rican Locusts.

BY LAWRENCE BRUNER, University of Nebraska.

(Plate XI)

While working over the material that has been amassed for the purpose of preparing the manuscript for that portion of the *Biologia Orthoptera* dealing with the locusts or short-horned grasshoppers, a number of very interesting forms have been encountered. From among these, two have been singled out as being unusually remarkable.

Since preparing the table for separating the subfamilies of these insects that were known at the time to be represented in the territory covered by that great work, an additional subfamily for North America has come to light. This occurred among some very interesting things that were taken in southern Costa Rica, a region which, if carefully explored, would no doubt add to our Central American fauna many striking forms of *Acrididæ* belonging to South American genera, as well as those indigenous to the region itself. It is too bad therefore that no more careful field work has been done in the way of amassing material belonging to this greatly neglected family in that sec-

tion of country. Most collectors appear to be but little interested in the various locusts or short-horned grasshoppers as they occur in localities being worked, but rather take to collecting the more brightly colored katydids and their allies. Only a specialist, and one thoroughly trained in tropical collecting, would seemingly succeed in bringing together the greater percentage of locusts that are to be found in those rich but difficult regions to work.

Family PROSCOPIDÆ.

Genus **TAXIARCHUS** Brunner.

Taxiarchus septentrionalis sp. n.

Size large. General color dirty olive brown, the only variation from this being faint indications of darker mottlings on the hind femora which tend to cluster so as to form obscure bands on the basal half. Prothorax quite coarsely and evenly granulate, the lower surface as well as top and sides being thus modified. The only exception to this kind of surface over this portion of the insect's body is a narrow, even, smooth strip on the sternum which extends from the base of the front legs to the back edge of the prosternum. In the male this smooth portion is lowered or sulcate and has the appearance of being bounded by broad low carinæ. The surface of the meso- and metathorax is also granular, but to a less degree than that of the prothorax, while their sterna are almost smooth. The sides of the mesopleura while not crenulate, as indicated in Brunner's diagnosis of the genus, suggest a trace of such a characteristic to a sufficient degree to permit of its being placed here. Anterior legs with the femora about two-thirds as long as, and arising a little back of the middle of the prothorax. The hind pair moderately heavy; the tibiæ strongly bowed, considerably longer than the femora, and having 19 or 20 spines in the outer row.

Length of body, ♀, 147 mm.; ♂, 72 mm.; of head, ♀, 20 mm.; ♂, 12.5 mm.; of fastigium, ♀, 3 mm.; ♂, 2.20 mm.; of pronotum, ♀, 37 mm.; ♂, 19 mm.; of anterior femora, ♀, 22.5 mm.; ♂, 10.5 mm.; of hind femora, ♀, 50 mm.; ♂, 24 mm.; of hind tibiæ, ♀, 54 mm.; ♂, 26 mm.

The above description is based on two specimens, a male and a female, which were collected during the month of June at Pozo Azul, Costa Rica, by M. A. Carriker. He told me that they were found on the trunk of a tree where they were so well protected by their color that they were only accidentally discovered. Thinking at the time that they were Phasmidæ he did not make a search for others.

Genus **SCOLOCEPHALUS** nov. gen.

This genus of locusts is at once characterized by the spike-like prolongation of the vertex in front of the eyes, by the wide parallel-sided tegmina, the large fan-shaped wings, and the cylindrical strongly tubercled pronotum. It is further differentiated by the long, heavy antennæ, the broadly concave meso- and metasternum, and the long slender abdomen, all of which characters are well shown in the accompanying dorsal and lateral views of *Scolocephalus mirabilis* which is described herewith.

Scolocephalus mirabilis n. sp. (Plate XI.)

Dark brownish olivaceous, varied on cheeks below the eyes, lower portion of sides of pronotum and pleura with a rather wide testaceous band. Inner face of hind femora deep blood-red. Tegmina dark olive brown, the veinlets paler, and the surface faintly and irregularly maculate with dull fuscous markings. Wings dark chrome yellow, the apex somewhat infuscated. Hind tibiæ internally and inner gena of femora black, the outer face dirty olive brown. Pectus and venter yellowish, the abdomen above, especially apically and at the apex of segments, dull olivaceous. Eyes æneous.

Head large, a trifle broader than the front edge of the cylindrical pronotum; occiput moderately elongate, smooth; vertex between the eyes about as wide as the shortest diameter of one of them, and provided with a transverse ridge composed of three coalescing tubercles, just in front of this suddenly depressed and giving to the anterior part of the vertex the appearance of being separated from the fastigium. The latter greatly attenuate, rounded and nearly regularly tapering as shown in the illustrations, the sides gently undulate or sinuous, and provided with two series of small acute tubercles; the extreme apex rounded. Frontal costa linearly produced to the apex of fastigium, near the base furcate and sulcate to the ocellus, obsolete below this. Face from base of antennæ to clypeus short, the lateral carinæ straight, gently diverging, considerably longer than the cheeks below them. Pronotum cylindrical, rough as well as punctate, without carinæ, the anterior and posterior margins broadly rounded and studded with large blunt tubercles as is also the most of the intervening surface; hind lobe about half as long as the anterior one. Tegmina and wings considerably shorter than the abdomen, but a little surpassing the tip of the hind femora, the former broad, with straight veins, parallel edges and broadly rounded apex; the latter short and broad with few irregular veinlets. Hind femore elongate, but gently inflated and only slightly attenuated apically, the pinnæ on the outer face somewhat irregular; tibiæ hairy, rather deep on basal, gently bowed inwardly and more slender on apical half, outer edge seven spined, the

two upper ones small, the apical one present and nearly as long as the others. Hind tarsi long and slender, the first and second joints subequal in length. Tip of abdomen very gently enlarged, the last ventral segment acuminate and in the middle carinate, the apex entire; supra-anal plate scutellate on basal half, attenuate and bent gently downwards on apical half; cerci long and slender, directed backwards and bowed inwards distally. Mesosternal lobes with their inner edges rounded and about one-half as widely separated as the width of one of the lobes. Prosternum long, the spine located near its front edge, short, blunt and directed gently to the rear.

Length of body, ♂, 54.5, of antennæ, 21.5, of fastigium, 9.75, of pronotum, 8, of tegmina, 27, of hind femora, 19 millimeters.

Habitat.—Taken at Pozo Azul, Costa Rica, Central America, in June, by C. F. Underwood. (Collection of L. Bruner.)

From the general appearance of the insect, its somber color, its gently concave breast, the long and slender tarsi and strong claws, etc., it is surmised that it has the habit of clinging to the stems of plants in shady places. The female is without doubt much larger, and is apt to have peculiar modifications of the ovipositor.

A Review of a Review.

BY HENRY SKINNER.

Dr. Dyar, in the *Journal of the New York Entomological Society*, p. 207, December, 1905, devotes eleven lines and three words to telling the readers of the *Journal* what he knows about a supplement* published by myself. He says: "*It is somewhat bristling with typographical errors and blunders, but we are used to that sort of thing from Philadelphia.*" The Washington editor of the *New York Journal* could have used the space to better advantage by pointing out those blunders and the entomological world would have been the gainer thereby. Review by innuendo is of no use to anyone except to vent spleen. I don't know whether the words "*but we are used to that sort of thing from Philadelphia*" is a gratuitous insult to me or to all the Philadelphia entomologists, including the illustrious dead. Now Dr. Dyar has been laboring under a hallucination in relation to what he is pleased to call my position in regard to

*A Synonymic Catalogue of North American Rhopalocera. Supplement No. 1. By Henry Skinner.